

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-18 are pending in the application, with 1 and 16 being the independent claims. Claim 1 is amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 102

In paragraph 3 on page 2 of the Office Action, claims 1-12 and 14-18 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,147,605 to Vega *et al.* (hereinafter Vega). Applicants respectfully traverse the rejection, and request that it be withdrawn.

Claims 1-12, 14, and 15

Technical differences exist between Vega and the claimed embodiments of the present invention. Vega relates to electrostatic coupled RFID tags (*e.g.*, *see* col. 2, lines 58-60 of Vega). For example, FIG. 3 of Vega shows a RFID tag system 200, including an exciter 202, reader 204, and tag 100. Reader 204 appears to communicate with exciter 202. Exciter 202 generates a signal that is electrostatically coupled to first and

second electrostatic antenna elements 112 and 114 of tag 100. Thus, tag 100 of Vega communicates electrostatically. (*See* col. 5, line 61-col. 6, line 13).

In contrast to the tag of Vega, which communicates *electrostatically*, claim 1 of the present invention recites a RFID tag device comprising an antenna that receives an *electromagnetic* carrier signal. Thus, Vega does not teach each and every element of claim 1, and for at least this reason, claim 1 is patentable over Vega.

Furthermore, claim 1 recites a modulator configured to select one of a plurality of frequencies according to the response value to be a selected frequency signal. Vega describes a modulation encoder 221 that "uses any suitable means of modulation to encode information read from memory 220, including phase modulation, amplitude modulation, frequency modulation, or a combination of these" (col. 6, lines 39-45). However, nowhere does Vega teach a modulator configured to select one of a plurality of frequencies according to the response value, as recited in claim 1. Thus, Vega does not teach this element of claim 1, and for at least this reason, claim 1 is patentable over Vega.

Accordingly, Applicants respectfully submit that independent claim 1 is patentable over Vega, for at least these reasons. Furthermore, claims 2-12, 14, and 15, which depend from claim 1, are also patentable over Vega for at least these reasons, and further in view of their own features. Thus, Applicants respectfully request that claims 1-12, 14, and 15 be passed to allowance.

Claims 16-18

Independent claim 16 is reproduced below (emphasis added):

16. A reader that communicates with a radio frequency identification (RFID) tag device, comprising:
a transmitter that transmits a radio frequency carrier signal modulated with a data symbol;
a receiver that receives at least one backscatter symbol related to the transmitted data symbol;
and

a logic module that determines at least one backscatter frequency of said at least one backscatter symbol, wherein said logic module determines that said at least one backscatter symbol represents a first data value when said at least one backscatter frequency includes a first frequency, and determines that said at least one backscatter symbol represents a second data value when said at least one backscatter frequency is determined to include a second frequency.

Vega does not teach a logic module of a reader, as recited in claim 16. The Office Action on page 4 states that, regarding claim 16, "Vega discloses a reader . . . wherein *the logic module 116* that determines that the at least one backscatter symbol represents a first data value when . . ." (emphasis added). However, logic module 116 referred to in the Office Action is actually integrated circuit 116 of tag 100 of Vega. Integrated circuit 116 is not of a reader, as asserted in the Office Action. Nowhere does Vega teach a reader having "a logic module that determines at least one backscatter frequency of said at least one backscatter symbol, wherein said logic module determines that said at least one backscatter symbol represents a first data value when said at least one backscatter frequency includes a first frequency, and determines that said at least one backscatter symbol represents a second data value when said at least one backscatter frequency is determined to include a second frequency," as recited in claim 16. Thus, Vega does not teach each and every element of claim 16, and for at least this reason, claim 16 is patentable over Vega.

Accordingly, Applicants respectfully submit that independent claim 16 is patentable over Vega, for at least these reasons. Furthermore, claims 17 and 18, which depend from claim 16, are also patentable over Vega for at least these reasons, and further in view of their own features. Thus, Applicants respectfully request that claims 16-18 be passed to allowance.

Rejections under 35 U.S.C. § 103

On page 5, paragraph 5 of the Office Action, claims 13 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vega. Applicants respectfully traverse the rejection, and request that it be withdrawn.

As described above, Applicants assert that claims 1 and 16 are patentable over Vega for at least the reasons stated above. Applicants assert that claims 13 and 18, which depend from claims 1 and 16, respectively, are also patentable over Vega for at least the reasons described above with regard to their respective independent claims, and further in view of their own features. Accordingly, Applicants respectfully request that the rejection of claims 13 and 18 be reconsidered and withdrawn.

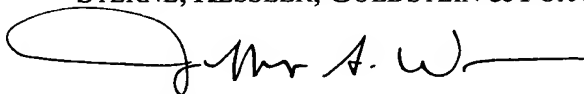
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Jeffrey S. Weaver", with a large, stylized initial "J" and a horizontal line extending to the right.

Jeffrey S. Weaver
Attorney for Applicants
Registration No. 45,608

Date: 1-5-05

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600